

IN THE CLAIMS

Claims 1-10 (Canceled)

~~1-~~ 11. (currently amended) A guiding grid of variable geometry comprising:

a turbine housing (2) including an axial outlet pipe (10);

a plurality of guiding vanes (7) arranged in said housing (2) in angular distances around a central axis (R) in an axially extending vane space of a predetermined axial distance, each vane (7) being pivotal about an associated pivot ~~pivoting~~ axis (8) in relation to said central axis (R) to form a nozzle of variable cross-section between each pair of adjacent vanes (7);

a generally annular nozzle ring (6) for supporting said vanes (7) for pivoting ~~said vanes~~ about their respective said pivot axis (8), said nozzle ring (6) forming a first axial limitation of said vane space;

a ~~pivotable~~ unison ring (5) pivotable around said central axis (R) relative to said nozzle ring (6), said unison ring (5) being operatively connected to said vanes (7) in order to pivot said vanes (7) about their pivot axis (8) ~~in relation to said central axis (R)~~ when said unison ring (5) is pivoted;

a disk (29) with a central opening, said disk (53) fixed connected to ~~said housing and opposite~~ and spaced from said nozzle ring (6) ~~in~~ at an axial distance corresponding to said predetermined axial distance relative to the central axis (R) to form a second axial limitation of said vane space, and

~~wherein the central opening (53) or a central outlet pipe (10) of the turbine housing (2) is insertable into a sleeve (45) such that the sleeve (45) is insertable into said central opening (53) for~~ extending through said disk (29) central opening, engaging said disk (29), and extending into and attaching to said turbine housing axial outlet pipe (10) thereby fixing the guiding vanes (7), nozzle ring (6) and disk (29) to ~~guiding grid in the turbine housing (2) inclusive of the guiding grid in its central outlet (10).~~

~~2- 12.~~ (currently amended) The guiding grid according to claim ~~1~~ 11, wherein said ~~central opening (53) engages at least one driver flange (46)~~ sleeve (45) includes at least one engaging piece engaging said disk (29) for securing said disc to said turbine housing (2), which is provided in the central outlet opening (10) of said housing.

~~3- 13.~~ (currently amended) The guiding grid according to claim ~~2~~ 12, wherein said engaging piece ~~driver flange (46)~~ comprises a radially extending flange (46) which engages said disk (29) at the side of the disk facing said vane space.

~~4- 14.~~ (currently amended) The guiding grid according to claim ~~1~~ 13, wherein said disk comprises at least one recess for receiving and engaging said ~~at least one driver flange (46).~~

5- 15. (currently amended) The guiding grid according to claim 2 13, wherein said ~~at least one follower~~ flange (46) closes off the surface of the disk (29).

6- 16. (currently amended) The guiding grid according to claim 5 15, wherein said disk (29) comprises ~~comprise~~ at least one annular recess ~~for receiving and engaging and wherein~~ said ~~at least one driver~~ flange (46) is an annular flange.

7- 17. (currently amended) The guiding grid according to claim 6 16, wherein said recess has an axial dimension to allow said ~~driver~~ flange (46) to be aligned with said ~~one~~ surface of said disk which faces said nozzle ring (6).

8- 18. (currently amended) The guiding grid according to claim 4 11, wherein said housing (2) comprises a wall extending substantially perpendicular to said central axis (R), said wall being substantially parallel to said disk (29), the guiding grid further comprising fastening means for interconnecting said wall and said disk.

9- 19. (currently amended) A turbocharger comprising:
a shaft extending along a central axis(R);
a turbine wheel mounted on said shaft;
a turbine housing (2) for housing said turbine wheel in a turbine space of said turbine housing including:

a peripheral supply channel for allowing exhaust gas to enter said turbine space and to drive said turbine wheel,

a central discharge pipe (10) which extends along said central axis (R) and forms an opening of said turbine space, and

a wall surrounding said opening;

a bearing housing (4) releasably attached to said turbine housing for supporting said shaft;

~~a guiding grid surrounding said turbine space to guide said exhaust gas towards said turbine wheel, said guiding grid including:~~

a plurality of guiding vanes (7) arranged in said turbine housing in angular distances around said central axis (R) in an axially extending vane space of a predetermined axial distance, each vane (7) being pivotal about an associated pivot ~~pivoting~~ axis in relation to said central axis (R) to form a nozzle of variable cross-section between each pair of adjacent vanes(7);

a generally annular nozzle ring (6) for supporting said vanes (7) around said central axis (R), said nozzle ring (6) forming a first axial limitation of said vane space;

a ~~pivotable~~ unison ring (5) pivotable around said central axis (R) relative to said nozzle ring (6), said unison ring (5) being operatively connected to said vanes (7) in order to pivot said vanes (7) about their pivot axis (8) when said unison ring (5) is pivoted in relation to said central axis (R);

a disk (29) with a central opening,

means for connecting said disk (29) to said nozzle ring (6)
at an axial distance corresponding to said predetermined axial
distance relative to the central axis (R) to form a second axial
limitation of said vane space, and

~~a fixing means fixed to said housing (2) and facing said~~
~~nozzle ring (6) in an axial distance corresponding to said~~
~~predetermined axial distance to form a second axial limitation~~
~~of said vane space, said fixing means forming a central opening~~
~~(53);~~

a sleeve inserted through said opening in said disk (29)
and into said central discharge pipe (10) central opening (53)
and having fixing means for engaging said a central discharge
pipe (10) and means for engaging said disk (29) to thereby
secure said guiding vanes (7), nozzle ring (6) and disk (29) to
said turbine housing (2) for determining the axial position
relative to the housing (2); and

~~a plug connection for interconnecting said wall of said~~
~~turbine housing and said guiding grid, thus defining the angular~~
~~position in peripheral direction of said guiding grid relative~~
~~to said housing (2), while said fixing means define the axial~~
~~position of said guiding grid.~~

~~10- 20.~~ (currently amended) The turbocharger according to
claim 9 19, further including indexing means for indexing the
angular position of said disk (29) and guiding vanes (7)
relative to said turbine housing (2) during assembly, wherein
said indexing means is an element (49) extending through bores
(48') in said disk (29) and wherein said plug connection

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~~comprises at least one hole in said fixing means for receiving a
pin member for defining the angular position in peripheral
direction of said guiding grid relative to said housing (2).~~

~~11.~~ 21. (canceled)